UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,335	09/08/2003	Kang Soo Seo	1740-000050/US	1951
	7590 05/22/2007 CKEY & PIERCE, P.L.C	2.	EXAMINER	
P.O. BOX 8910 RESTON, VA 20195			WENDMAGEGN, GIRUMSEW	
			ART UNIT	PAPER NUMBER
			2621	
			MAIL DATE	DELIVERY MODE
			05/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
·	10/656,335	SEO ET AL.
Office Action Summary	Examiner	Art Unit
	Girumsew Wendmagegn	2621
The MAILING DATE of this communication a Period for Reply		the correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA 1.136(a). In no event, however, may a repl of will apply and will expire SIX (6) MONTH ute, cause the application to become ABAN	NTION.  y be timely filed  IS from the mailing date of this communication.  IDONED (35 U.S.C. § 133).
Status		
<ul> <li>1) ⊠ Responsive to communication(s) filed on <u>08</u></li> <li>2a) ☐ This action is FINAL. 2b) ⊠ Th</li> <li>3) ☐ Since this application is in condition for allow closed in accordance with the practice under</li> </ul>	nis action is non-final. vance except for formal matter	• •
Disposition of Claims		
4) ☑ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☑ Claim(s) 1-20 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		,
9) The specification is objected to by the Examination 10) The drawing(s) filed on is/are: a) and according a specific and any not request that any objection to the Replacement drawing sheet(s) including the corresponding to the latest and the second se	ccepted or b) objected to by ne drawing(s) be held in abeyance ection is required if the drawing(s)	e. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119	•	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received.  nts have been received in Application of the properties of the proper	olication No ceived in this National Stage
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) ☐ Interview Sur	nmary (PTO-413)
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 6/21/2004.</li> </ul>	Paper No(s)/I	Mail Date rmal Patent Application

#### **DETAILED ACTION**

### Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 19-21 been renumbered 18-20.

# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1-15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable

Art Unit: 2621

medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim1-3, 6-10,13-20 is rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al (Pub. Number US 2002/0145702).

Regarding claim1, 16,19 and 20, Kato et al (hereinafter Kato) anticipates a system for modifying a first television signal to produce a second television signal that is displayed by a video display unit upon being received by the video display unit, the

Application/Control Number: 10/656,335

Art Unit: 2621

system comprising: a memory unit that stores information corresponding to an alternate television commercial signal; a control unit that is coupled to the memory unit and receives the first television signal; wherein the first television signal includes at least, during a first time period, a television program signal and, during subsequent time periods, a first commercial signal and a second commercial signal; and wherein, upon a first condition being met, the control unit substitutes the alternate commercial signal based upon the stored information for at least one of the first and second commercial signals to produce a second television signal (see figure 14 and page8 paragraph 0190).

Regarding claim2, Kato anticipates the system of claim 1, wherein the control unit substitutes the alternate commercial signal for the second commercial signal (see figure 14 and page10 paragraph 0217).

Regarding claim3, Kato anticipates the system of claim2, wherein the first condition is detection of at least one blank period within the first television signal by the control unit (see page6 paragraph 0150).

Regarding claim6, Kato anticipates the recording medium of claim 3, wherein the playitem includes an indicator indicating a file name of a clip information file associated with the clip file (see figure 32 clip info file name).

Application/Control Number: 10/656,335

Art Unit: 2621

Regarding claim7, Kato anticipates the recording medium of claim 6, wherein the playitem includes an indicator indicating an STC id for a portion of the clip File indicated by the clip information File name (see figure 32 STC seq Id).

Regarding claim8, Kato the recording medium of claim 3, wherein the playlist further includes at least one playlist mark pointing to the still image in the clip file (see figure 42 Playlist mark).

Regarding claim9, Kato anticipates the recording medium of claim 2, wherein the playlist includes sub-playitem, and the sub-playitem includes the navigation information (see figure 25 and 40 sub-playitem).

Regarding claim 10, Kato anticipates the recording medium of claim 2, wherein the navigation information further includes at least one playlist mark pointing to the still image in the clip file (see figure 42 playlist marks).

Regarding claim 13, Kato anticipates the recording medium of claim 1, further comprising: a data area storing the clip file of video data (see page 10 paragraph 0214).

Regarding claim14, Kato anticipates the recording medium of claim13, wherein the video data of the clip file includes at least one of an I picture, B picture and P picture (see page6 paragraph 0148).

Regarding claim15, Kato anticipates the recording medium of claim 14, wherein the navigation information indicates to display the at least one of an I picture, B picture and P picture in the clip file as the still image (see page6 paragraph 0148).

Regarding claim 17, Kato anticipates The method of claim 16, further comprising: reproducing one of a playlist mark, a playitem and a sub-playitem in a playlist recorded on the recording medium, the one of the playlist mark, playitem and sub-playitem providing the navigation information (see figure 25 and 40 sub-playitem).

Regarding claim18, Kato anticipate an apparatus for reproducing a still image recorded on a recording medium, comprising: a driver for driving an optical reproducing device to reproduce data recorded on the recording medium (see figure1 element 22); a controller for controlling the driver to reproduce a still image from a clip File recorded on a recording medium based on navigation information indicating a portion of a clip File, which includes video data, to display as a still image and a duration to display the still image (see figure1 element 23).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Application/Control Number: 10/656,335

Art Unit: 2621

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim4-5, and 11-12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (Pub. Number US 2002/0145702).

Regarding claim4-5 and 11-12, see the teaching of Kato above. Kato does not teach playitem including indicator indicating whether to display a still image. However it is old and well known in the art to have indicator whether to display a still image.

Therefore official notice is taken.

One of ordinary skill in the art at the time the invention was made would have been motivated to have indicator in playitem indicating whether to display a still image in to Kato system because it would help protecting the content (still image) by indicating whether or not the contents can be shown to the user without limitation (see Kato et al page11 paragraph 0231).

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Girumsew Wendmagegn whose telephone number is 571-270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alr Friday off.

Page 8

Application/Control Number: 10/656,335

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system. Call 809-786-9189 (IN USA OR CANADA) or 571-272-1000.

Girumsew Wendmagegn

Supervisory Patent Examiner